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VT Facilities-Based Providers	Change in Mkt.	Current Financial Situation		
Adelphia Business	<u>Cap.</u> ¹ - 98.66%	Spun off by parent Adelphia Communications with \$1.4 billion		
Solutions		debt which analysts predict will force into sale, radical restructuring, or bankruptcy, ² announced in January 2002 no dividend payments forthcoming on preferred stock following Salomon Smith Barney report that it faces "near-term restructuring or bankruptcies;" rumors of impending bankruptcy have caused stock to plunge and cut off new capital. ⁴		
Z-Tel	- 58.97%	Reported 3 rd Quarter 2001 loss of \$26 million and \$156.9 million loss for first 9 months of year 2001; ⁵ cut customer base by 13% in 3 rd Quarter 2001; ⁶ eliminated over 40% of its workforce, ceased telemarketing, wrote off 80,000 deadbeat subscribers at cost of \$30 million; ⁷ significantly slowing its acquisition of new subscribers and its expansion into new markets; ⁸ reported year 2000 loss of \$111.7 million. ⁹		
АТ&Т	- 24.04%	Announced in January 2002 plans to record \$1 billion 4 th Quarter 2001 restructuring charge and expects to eliminate 5,000 employees in 2002, after cutting 8,000 in 2001. ¹⁰		
DSL.net	- 74.51%	Reported 3 rd Quarter 2001 net loss of \$10.4 million; ¹¹ Nasdaq contacted in July 2001 regarding possible delisting; ¹² applied to FCC in July 2001 to discontinue interstate special access DSL service for high-speed Internet access in 22 states; ¹³ reported 2 nd Quarter 2001 net loss of \$23.6 million, and 1 st Quarter net loss of \$25.7 million; ¹⁴ announced in July 2001 elimination of 90 jobs and closing of 250 operational central offices, and expects to record a loss of \$80 to \$90 million in 2001. ¹⁵		
StarBand		Laid off 30% of employees in 2001, and has not made a profit for investors due in part to slower than expected demand. 16		
Hughes Electronics Corp.		Reported year 2001 net loss of \$621.6 million, 4 th Quarter 2001 net loss of \$132.6 million, and has agreed to sell its DirecTV satellite television unit to EchoStar Communications Corp, ¹⁷ satellite Internet subsidiary (Hughes Network Systems) laid off 200 workers in December 2001, ¹⁸ cut forecasts for new subscribers and reported negative 3 rd Quarter 2001 EBITDA of \$22.6 million. ¹⁹		

¹ The figures in this column represent the percentage below the 52-week high for the respective publicly-traded stocks, as calculated by Morningstar.com at the close of trading on February 4, 2002.

² Leon Lazoroff, Adelphia set to leave ABIZ to fend for itself, THE DAILY DEAL, January 11, 2002, available in 2002 WL 6786276.

³ This Week in the Market, NATIONAL POST, January 5, 2002, available in 2002 WL 4161263; COMM Daily Notebook, COMMUNICATIONS DAILY, January 7, 2002, available in 2002 WL 5240330.

⁴ Fred O. Williams, 'Last Mile' Lapse Puts Future On Hold Series: Wiring Buffalo, Buffalo News, November 19, 2001, available in 2001 WL 6364121.

⁵ Earnings Reports, The TAMPA TRIBUNE, November 9, 2001, available in 2001 WL 26696964.

⁶ Jeff Harrington, Z-Tel cuts losses, but client list falls, St. Petersburg Times, November 9, 2001, available in 2001 WL 29785239.

⁷ See Cherie Jacobs, Z-Tel Technologies of Florida Cuts Costs, Losses, TAMPA TRIBUNE, June 29, 2001, available in 2001 WL 2447401.

⁸ See Press Release, Z-Tel Offers Guidance on Revised Business Model, Expected Results for 2nd Quarter, 3rd Quarter and 2001, (June 20, 2001) http://biz.yahoo.com/bw/010620/0194.html>.

⁹ See Scott Barancik, A Friendly Reminder from the Boss, St. Petersburg Times, May 21, 2001, available in 2001 WL 22043411.

AT&T Expects to Take \$1 Billion 4th-Quarter Restructuring Charge, Dow Jones (January 4, 2002) http://news.morningstar.com/news/PR/M01/D04/1010180462645.html>.

Danielle Fugazy, DSL.net Sells Out to VantagePoint, PRIVATE EQUITY WEEK, December 3, 2001, available in 2001 WL 7962671.

¹² See Matthew Lubanko, Nasdaq Eases Rules on Delisting, THE HARTFORD COURANT, September 28, 2001, available in 2001 WL 25323916.

¹³ See Today's Key FCC Actions, Washington Telecom Newswire, August 16, 2001, available in 2001 WL 7162383.

¹⁴ See DSL net Reports Second Quarter Revenue Up 195% Over Year; Net Loss, Restructuring Charges, Improves 13% Over Last Year; First Half Revenue Surpasses Full Year 2000 Revenue, Business Wire (August 1, 2001) http://news.morningstar.com/BW/M08/D01/96738738735830.html.

¹⁵ See Rodney L. Pringle, DSL.net Cuts 90 Jobs, Lowers 2001 Outlook, COMMUNICATIONS TODAY, July 3, 2001, available in 7/3/01 COMTD.

¹⁶ Yuki Noguchi, Slow to Take Off; Internet Service Via Satellite Remains an Expensive Choice, The Washington Post, August 8, 2001, available in 2001 WL 23185389; Nir Goldberg, Gilat Satellite Networks' unsuccessful investments, Israel Business Arena, July 14, 2001, available in 2001 WL 24719066; The Satellite News Financial Ticker, Satellite News, August 20, 2001, available in 2001 WL 523096.

¹⁷ Hughes Electronics Reports Net Loss, AP Online, January 15, 2002, available in 2002 WL 10031467.

¹⁸ Financial: In Brief, THE WASHINGTON POST, December 18, 2001, available in 2001 WL 31543709.

¹⁹ Hughes 3rd Quarter Loss Grows on Layoffs, SATELLITE WEEK, October 22, 2001, available in 2001 WL 8140365.

BEFORE THE FEDERAL COMMUNICATIONS COMMISSION WASHINGTON, D.C. 20554

FEDERAL COMMUN		TIONS COMMISSION D.C. 20554	RECEIVED FEB
In the Matter of)		OFFICE OF THE SOURCE
Application by Verizon New England Inc.,			SECRETAGE SION
Bell Atlantic Communications, Inc. (d/b/a		CC Docket No. 02-7	•
Verizon Long Distance), NYNEX Long			
Distance Company (d/b/a Verizon			
Enterprise Solutions), Verizon Global)		
Networks Inc., and Verizon Select Services)		
Inc., for Authorization To Provide In-)		
Region, InterLATA Services in Vermont)		

DECLARATION OF MICHAEL LIEBERMAN ON BEHALF OF AT&T CORP.

I. **BACKGROUND AND SUMMARY**

1. My name is Michael R. Lieberman. I am a District Manager in AT&T's Law and Government Affairs organization. In this position I am responsible for providing financial and industry analysis support relating to the costing and pricing of local telecommunications services. I was AT&T's primary participant in the development of the HAI/Hatfield Model of forward looking economic costs of local exchange networks and services and have been responsible for evaluating other costing models and methodologies such as the BCPM and the FCC's Synthesis Model. I have a Bachelor's degree in mathematics and a Master's degree in statistics from the State University of New York at Stony Brook. Prior to joining AT&T as a statistical consultant in 1978, I was a bio-statistical consultant with Carter-Wallace of Cranbury, New Jersey. The purpose of my testimony is to show that Verizon's UNE rates in Vermont are vastly overstated.

- 2. I first demonstrate that a comparison of Verizon's Vermont rates to those recently adopted by the New York Public Service Commission ("NYPSC") shows that Verizon's Vermont rates exceed those in New York on both a cost-adjusted basis and on a nominal basis. In addition, Verizon's daily usage feed (or "DUF") charge in Vermont is also vastly overstated; Verizon's Vermont DUF charge is more than double that in other Verizon states where Verizon has obtained Section 271 approval.
- 3. I also demonstrate that Verizon's Vermont cost models use outmoded 1995/1996 data to compute rates. Verizon's Vermont switch and loop costs have declined dramatically since then. Thus, even if Verizon's Vermont rates approximate 1995/1996 forward-looking costs (and Verizon has not established that they do), those rates far exceed properly computed 2002 forward-looking costs.
- 4. Finally, my analysis of Verizon's Vermont rates shows that the conditions necessary to support residential competitive entry in Vermont do not exist because Verizon's Vermont UNE rates are far too high to support mass-market UNE-based retail offerings. This result holds true even when all revenues and benefits that could be incrementally obtained from providing UNE-based local services (*e.g.*, the sale of vertical services) are considered. I also explain why resale and UNE-L local entry are not economically feasible alternatives to UNE-platform based offerings.

II. VERIZON'S VERMONT UNE SWITCH RATES SUBSTANTIALLY EXCEED THOSE IN NEW YORK ON A COST ADJUSTED BASIS.

5. Although Verizon's Vermont costs are 17% above those in New York, Verizon's Vermont switching rates are a whopping 102% higher than those recently adopted by the NYPSC. Thus, Verizon's Vermont rates far exceed those in New York on a cost adjusted basis.

A. Development Of Rate Comparison Between New York And Vermont.¹

- 6. As shown in Exhibit A-1, the there are four general elements that can generically be used to compute switching rates: (1) local switching rates for originating and terminating calls; (2) signaling; (3) common trunk port; and (4) line side ports. I discuss each of these rates in turn.
- 7. Local Switching Rates. UNE-platform entrants must pay Verizon per minute fees for switching of calls that originate or terminate to the entrants' UNE-P customers. In Vermont that per minute fee is \$0.004003 for both originating and terminating switching. In New York that per minute fee is \$0.001147 for originating calls and \$0.001111 for terminating calls.
- 8. Common Trunk Port. UNE-platform entrants must pay Verizon per minute fees for common trunk port on calls that originate or terminate to the entrant's UNE-P customer. In Vermont that per minute fee is \$0.000287 for both originating and terminating traffic. In New York that per minute fee is \$0.000371 for originating and terminating traffic.
- 9. In order to convert these per minute rates into monthly per line fees, it is necessary to assume a monthly number of originating and terminating minutes to which these rates will apply. The Commission has used 1200 local minutes per line per month for both originating and terminating minutes as well as an additional 370 toll-related minutes (accounts for both originating and terminating MOU). See Pennsylvania 271 Order at n.252. Accordingly, my analysis also reflects 1385 originating minutes per line per month.
- Based on this assumption, entrants must pay (1385 x 0.004003 =) \$5.54 per line per month in local switching origination fees to Verizon in Vermont. And entrants must pay

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¹ The Vermont and New York rates that I use in this analysis are documented in Exhibits A-2 and 3.

(1385 x \$0.001147 =) \$1.59 per line per month in local switching origination fees to Verizon in New York.

- 11. To compute the per line monthly terminating fees requires an additional step. For intraswitch calls in New York, UNE charges for terminating local minutes of use to an entrant's end users are offset exactly by reciprocal compensation owed to the entrant. *See Pennsylvania 271 Order* at n.252. Entrants in New York must pay only the originating switching charges, and no terminating switching charges, for intraswitch calls. It is necessary, therefore, to determine the portion of the 1200 local monthly terminating minutes that are interswitch calls in New York. The Commission has found that, for benchmarking purposes, a reasonable assumption for the number of interswitch minutes is 75 percent of local minutes, or (.75 x 1200 =) 900 minutes per month. *See Pennsylvania 271 Order* at n.252. Thus, entrants must pay Verizon ((900+185) x \$0.00111 =) \$1.15/line/month² in New York and (1375 x \$0.004003 =) \$5.54/line per month in Vermont.³
- 12. Based on these computations, entrants must pay Verizon \$2.74/line/month in local switching usage rates in New York and \$11.08/line/month for local switching usage in Vermont.
- 13. Signaling Rates. In both Vermont and New York, the signaling rate is included in the switch rate and therefore, no separate analysis is required to compute the signaling rates.
- 14. Common Trunk Port Rate. The Common Trunk Port Rate is a fee to recover the cost of the trunk ports in the switch that provide connectivity to the interoffice network. The Common Trunk Port Rate applies to both originating and terminating minutes for only interswitch calls because intraswitch calls do not access the interoffice network.

² The \$1.85 figure represents the toll-related terminating charges (370/2=185).

³ In Vermont, an intraswitch call still incurs 2 local switching minute charges.

- 15. As explained above, the Commission has assumed that 1085 minutes⁴ is a reasonable estimate of the number of interswitch minutes for both originating and terminating calls for benchmarking purposes. The Common Trunk Port Rates for Vermont and New York, therefore, apply to a total of 2170 minutes. That means that new entrants in Vermont must pay (2170 x \$0.000287 =) \$0.60/line/month to Verizon in Common Trunk Port fees and new entrants in New York must pay (2170 x \$0.000371 =) \$0.77/line/month to Verizon in Common Trunk Port fees.
- 16. Line Side Port Rates. Within the UNE rate/cost structure, the cost of the switch is separated into usage and non-usage driven elements. The Line Side Port Rate is a monthly per line fee which purportedly reflects the per line cost of the non-usage elements beginning with the connection of the switch on the subscriber loop side of the switch. The monthly line side port rate in Vermont and New York is \$1.03/line⁵ and \$2.76/line, respectively.⁶
- Adding all of these rates together produces the average per line monthly switching component that an entrant must pay to Verizon for a residential UNE-platform in Vermont and New York. Verizon's Vermont switching component of the UNE-platform is \$11.15/line/month. And Verizon's New York switching component of the UNE-platform is \$5.92/line/month. Thus,

⁴ That is 900 intraswitch minutes plus 185 toll-related minutes.

⁵ I have also included 19 cents in the NY port to account for the average cost of certain features that have separate rate elements. To determine this amount I computed feature penetration rates based on TNS market research data for 3Q2001. See Exhibit A-6. Vermont has no such recurring cost item.

⁶ In the past, there has been some confusion as to whether UNE-P customers must pay the "analog" line port rate or the "digital" line port rate in New York. As explained by Verizon in a recent New York state proceeding, the appropriate rate is the "digital" line port rate. See Exhibit A-4.

Verizon's Vermont switching rates are 102 percent higher than its New York switching rates.

See Exhibit A-5.

B. Cost Comparison Between New York and Vermont.

- appropriately be used to determine relative costs among states. See, e.g., Pennsylvania 271 Order ¶ 67. However, there is more than one approach to using the SynMod to compute interstate switching cost differences. In my view, the best approach is to compare the switch investment plus signaling investment produced by the SynMod. These figures are publicly available data and are the clear driver of switch-related costs. Moreover, using the SynMod's switch and signaling investments to make interstate comparisons avoids the necessity of making complex adjustments to the SynMod reflecting assumptions about the allocation of overhead, and other factors.
- 19. Another way to compare switching costs among states is to implement adjustments to the SynMod so that it produces an approximation of switching costs for the relevant states. The results of that approach, however, can be skewed by the assumptions that must be made to produce those costs (e.g., the allocation of overhead expenses to particular elements).
- 20. In all events, as I demonstrate below, using either methodology shows that the 102% difference between Verizon's Vermont and the New York rates cannot be explained by costs.

1. Switch And Signaling Investment Cost Comparison.

Application of the switch and signaling investment cost comparison is simple and straightforward. The SynMod shows that Verizon's Vermont and New York per line switch-

related plus signaling investments are \$195.75 and \$145.59, respectively. See Exhibit A-5. Thus, Verizon's Vermont switching costs are only 34 percent higher than those in New York. Clearly, that 34 percent cost difference cannot justify the fact that Verizon's Vermont rates are 102 percent higher than those in New York.

2. Adjusted SynMod Cost Comparison.

- 22. To use the Commission's Synthesis cost model to meaningfully compare the level of one state's UNE rates relative to another state's UNE rates, it is vital to control for any differences in underlying costs that may occur between these two states. The Commission has proposed that its Synthesis Model can be used as a basis for developing these cost controls.
- 23. However, as originally developed by the Commission, the Synthesis Model focuses on modeling the costs of universal service. Thus, as the Commission has recognized, it is necessary to make some adjustments to this model for it to generate the costs of individual UNEs. In particular, the Synthesis Model calculates the aggregate cost of providing (at retail) basic local telephone service. But UNEs differ from basic local service in that they are:
 - (a) Distributed via wholesale rather than retail processes;
 - (b) Include elements of LEC networks that are necessary to provide services beyond basic local service, such as carrier access service and local toll service; and

⁷ These values reflect fully installed switch investment that includes engineering, installation, power and features.

⁸ See Fifth Report and Order (Platform Order), In the Matter of Federal-Joint Board on Universal Service, CC-Docket No. 96-45, and Forward Looking Mechanism for High Cost Support for Non-Rural LECs, CC-Docket No. 97-160, Before the Federal Communications Commission, October 28, 1998; and Tenth Report and Order (Inputs Value Order), In the Matter of Federal-Joint Board on Universal Service (CC-Docket No. 96-45) and Forward Looking Mechanism for High Cost Support for Non-Rural LECs (CC-Docket No. 97-160), Before the Federal Communications Commission, November 2, 1999. The Synthesis Model may be obtained from the Commission's website at http://www.fcc.gov/ccb/apd/hcpm/.

(c) UNEs are sold on a disaggregated, granular basis, rather than as a prescribed bundle such as a flat rated residence line (1FR).

Thus, the Commission's Synthesis Model must be adjusted to accommodate these differences between UNE costs and universal service costs

- 24. In an *ex parte* presentation to the Commission on January 31, 2001, AT&T provided a roadmap for how the universal service Synthesis Model could be adjusted to provide measures of individual UNE costs that, given the input levels to the model, comport more closely with UNE principles.⁹ The steps of this process are as follows:
 - 1) Determine the appropriate level of non-distribution related common support expenses consistent with Synthesis Model data and processes.
 - a. Determine the total universal service common support expenses embedded in the Synthesis Model's calculated cost of basic local service. The base figure for these expenses is \$7.32. But because state-specific gross-ups for items such as other taxes and retail uncollectibles amounting to a national average total of 6.29% are applied to this base figure, the full amount of universal service common support expenses embedded in the Synthesis Model is \$7.78 per line on a national average basis.
 - b. Determine the extra common support expense costs that are incurred if the LEC provides carrier access and toll services in addition to local services. These may be derived from the Commission's regression equations on page D-5 of Appendix D in the *Inputs Value Order*, and amount to \$0.63 per line.
 - c. Add the base \$7.32 of universal service common support expense to the \$0.63 of access and toll expense to arrive at \$7.95 as the base common support expenses associated with the LECs' provision of a complete suite of telecommunications services.

⁹ Ex Parte letter from Robert W. Quinn, Jr., AT&T to Magalie Roman Salas, Federal Communications Commission, In the Matter of Application by Verizon New England, Inc. Bell Atlantic Communications, NYNEX Long Distance Company, and Verizon Global Networks to Provide In-Region InterLATA Services in Massachusetts, CC Docket No. 01-9, (filed February 1, 2001). Available at http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6512460518. It should be noted that no claim is made that the resultant "UNE" costs that result from these adjustments are appropriate measures of UNE TELRIC levels.

- d. Calculate the retail distribution expenses (i.e., marketing, service and customer operations expenses) that are included in this base \$7.95 of Synthesis Model common support expenses. These may be determined from the Commission's regression equations on page D-5 of Appendix D of the *Inputs Value Order* to be \$0.09 of marketing cost and \$3.68 of service and customer operations retail distribution cost amounting to a total of \$3.77 per line.
- e. Determine the G&A costs included in the Synthesis Model that are attributable to retail distribution activities. This may be done by determining that retail distribution expenses amount to 16% of total costs in the universal service Synthesis Model, and assuming that retail distribution costs account for the same percentage of total G&A expenses. Since these total G&A expenses for a LEC offering local, toll and access services amount to \$2.52, the portion of these G&A expenses attributable to retail distribution is \$0.40.
- f. Subtract the direct retail distribution expenses (\$3.77) and retail distribution expense portion of G&A (\$0.40) from the base level of common support expenses. This yields a per line figure of \$3.78 which represents all direct Synthesis Model common support expenses except those associated with retail or wholesale distribution.
- g. Adjust this common support expense level representing year 1998 by three years of productivity improvement at the Commission's most recently set LEC productivity factor of 6.5% per year net of inflation at 1.8% per year to derive a current common support expense level of \$3.26 per line.
- h. Gross-up this common support expense level by an amount slightly less than the 6.29% identified in (a), above to yield a total national common support expense level of slightly less than \$3.47 per line. 10
- i. Assign the \$3.47 non-distribution-related common support expenses to individual UNEs according to the relative fractions of total network investment that are associated with each individual UNE. 11

¹⁰ The gross-up will be slightly less than 6.29% because that amount included an allowance for retail uncollectibles – an expense that will not be applicable to the sale of UNEs.

This allocation of overhead can, in some cases, skew the results of an interstate cost comparison. In this proceeding, this may not be an issue because the percent of investment for loop in New York and Vermont are very similar. However, in future Section 271 proceedings, the direct cost comparison and the comparison reflecting overheads could substantially diverge. This result may occur in a situation where a state with low loop and switch costs is compared to a state with high loop costs. Because of the disparate loop investment, the allocation of the relatively fixed per line expense will lead to a larger amount of the per-line expense being allocated to switching in the low-cost state, thereby overstating switching costs in the low-cost state. Cost comparisons based on switch investment (as I have provided above) do not have this

- 2) Add the above assigned common support expenses to all of the other modeled costs associated with each UNE (e.g., capital carrying costs, maintenance expense, etc.) and gross up the result to account for wholesale uncollectibles.
- 25. In footnote 249 of its *Order* approving Verizon's Application to Provide In-Region InterLATA Services in Pennsylvania, the Commission acknowledges that it is using the same method as outlined above to determine state-specific UNE rates from the Synthesis Model. ¹²
- 26. Based on this approach, Verizon's Vermont costs for switching plus signaling exceed those of New York by 17%, which is insufficient to account for the 102% rate difference between those states. *See* Exhibit A-7, A8.
- 27. In its *Pennsylvania 271 Order* (n. 249), the Commission compared non-loop rates and cost rather than just switching. While switching related rates must be TELRIC on their own merit, there is still a significant gap between the non-loop rate difference and cost difference based upon the adjusted SynMod element cost. Verizon's Vermont non-loop costs are 57% above New York's costs, *See* Exhibit 8, whereas Verizon's Vermont non-loop rates are almost double those in new York.

III. VERIZON'S SWITCHING COSTS HAVE SUBSTANTIALLY DECLINED SINCE 1996.

28. Verizon's high switching rates are traceable, at least in part, to the fact that the cost models used to develop those rates are based on hopelessly outmoded 1995/1996 data that

problem. Another way to address this potential problem is to draw out the SynMod direct costs only (capital costs plus expense to investment expenses). This method also has the advantage of not requiring a change to the default SynMod outputs.

¹² I believe that the Commission has implemented these adjustments to wire center expense modules from the Synthesis Model, while AT&T has implemented these adjustments to density zone expense modules. But because the state-wide UNE cost results produced by these two

do not reflect the acute reductions in Verizon's Vermont costs since then. Verizon's ARMIS data demonstrates this point. Analysis of Verizon's Vermont net switch investments and its dial equipment minutes ("DEMs") shows that net switch investments have continually declined on a per-minute-of-use basis as the net switch investment has grown much slower than DEMs. The slow growing net switch investment, combined with the explosive increase in minutes, implies that there has been a 41% decline in switching investment per DEM between 1996 and 2000. See Exhibit A-9. See id. Thus, even if (contrary to fact) Verizon's cost model were capable of approximating cost-based rates for 1995/1996, those rates cannot possibly represent cost-based rates today.

expense module variants should be almost identical, the result generated by either analysis method should comport closely.

The Commission has also recognized the sharp decreases in ILEC switching costs during the past few years. See, e.g., Order on Remand and Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 and Intercarrier Compensation for ISP-Bound Traffic, CC Dockets No. 96-98 and 99-68, FCC 01-131, at 84, n. 157, 93 (April 27, 2001) (citing Letter from David J. Hostetter, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 14, 2001), Attachment (citing September 2000 Morgan Stanley Dean Witter report that discusses utilization of lower cost switch technology); Donny Jackson, "One Giant Leap for Telecom Kind?," Telephony, Feb. 12, 2001, at 38 (discussing cost savings associated with replacing circuit switches with packet switches); Letter from Gary L. Phillips, SBC, to Magalie Roman Salas, Secretary, FCC (Feb. 16, 2001) (attaching press release from Focal Communications announcing planned deployment of next-generation switching technology "at a fraction of the cost of traditional equipment").

A similar analysis shows that Verizon's loop costs have also declined during the past few years. A simple analysis of Verizon's Vermont net cable and wire ("C&W") investments (with and without circuit equipment) and its access lines reveals that net C&W investments declined significantly on a per-line basis between 1992 and 2000. In fact, between 1992 and 2000, net C&W investment grew much slower than access lines, resulting in an overall decline in net investment per line of 24% (18% if circuit investment included) from 1996 to 2000. Because Verizon's UNE loop rates do not reflect these decreased costs, those rates are not appropriate forward-looking cost-based rates. See Exhibits A-10 and A-11.

IV. VERIZON'S DUF RATES EXCEED TELRIC LEVELS.

- The daily usage file ("DUF") charge is a fee that Verizon charges CLECs for information regarding CLECs' usage. CLECs use that information to verify the accuracy of Verizon's bills and as a basis for billing their own customers. Because Verizon has not submitted its cost studies in this proceeding or to my knowledge, in any Vermont state proceeding it is impossible to determine exactly how Verizon computed its DUF rate. However, DUF costs are largely regional costs, not state-specific costs. Verizon's New York workpapers, for example, show that DUF rates are computed by summing processing, transmission and product management costs, and then grossing up those costs to account for overhead attributable to providing DUF; most of these costs are generally regional, not local in nature. See Exhibits A-12 through A-17.
- 30. Given that DUF costs are regional in nature, there should be little variation in the relative DUF rates among states. That is why it is inappropriate that Verizon's Vermont DUF rates substantially exceed the DUF rates in Verizon's other Section 271-approved states. Verizon's Vermont DUF rates are more than 11 times higher than those in Pennsylvania and more than 7 times higher than those adopted by the NYPSC for New York on January 28, 2002. See Exhibit A-17. Verizon offers no justification or explanation for its inflated DUF rates.
- One reason why Verizon's DUF rate is so high is that Verizon's Vermont data for computing DUF rates, like the data used for computing switching rates, are at least five years old (it is 1995/1995 data). Verizon itself has conceded that it has enjoyed substantial savings since 1995/1996 in overhead, management and other costs. One source of those cost savings are the

¹⁵ Verizon has eliminated the DUF charge in Massachusetts.

various mergers engaged in by Verizon since then. In addition, the cost of the computer equipment used to collect and furnish DUF have also decreased since the 1995/1996 time period. Moreover, DUF rates are very sensitive to usage levels. To the extent that usage has increased since 1995/1996 (which as explained below it has), Verizon's DUF rates would be substantially inflated by today's standards.

V. STATE-WIDE UNE-P ENTRY IS NOT ECONOMICALLY FEASIBLE IN VERMONT.

- 32. Given Verizon's massively overstated UNE rates, it should be no surprise that profitable state-wide UNE-based residential entry is not possible in Vermont. The viability of a UNE-based offering that is, whether it makes sense for AT&T (or any other entrant) to commit its shareholders' capital to that enterprise turns on the same type of analysis as any other investment decision. Capital is scarce and must be devoted to its highest-valued uses. Thus, a carrier considering whether to enter the local services business in a state (or to continue to participate in that business) must determine whether revenues attributable to the service will exceed the costs of providing the service by an amount sufficient to generate a return that is commensurate with the expectations of investors concerning risks and returns and with competing uses for the capital.
- 33. There are essentially three steps to this analysis: (1) identifying and estimating each of the costs of providing the service, (2) identifying and estimating each of the revenue opportunities that will be generated by providing the service, and (3) deriving from these estimated "cash flows" some standard financial measure that allows the investment opportunity to be assessed (and compared to alternative investment opportunities).
- 34. Because telecommunications carriers are subject to numerous reporting requirements, obtaining the inputs necessary to conduct my analysis was relatively

straightforward. Carrier-specific data, including retail local service prices, UNE prices, and access prices are largely publicly reported and directly verifiable. I am confident, therefore, that the following analysis paints an accurate picture of the barrier that Verizon's UNE prices in Vermont pose to residential competition in that state.

- 35. The remainder of this section is organized as follows. First, I describe the costs associated with a residential UNE-Platform offering in Vermont. Second, I describe the revenues that are available to carriers serving customers in Vermont. Third, I translate these cash flows into margins by looking at the difference in a Vermont entrant carrier's revenues and costs a type of financial measure commonly used by businesses to make investment decisions. This margin analysis shows that profitable residential UNE-Platform-based cannot be undertaken by competitive carriers in Vermont at the rates contained in Verizon's application. Exhibit B-1 to my declaration, entitled "UNE Connectivity Margin for Verizon in Vermont," summarizes the results of my cost, revenue and margin analysis. I refer to, and generally follow, this Exhibit B-1 in the discussion below. I also refer to supporting Exhibits B-2 through B-7, which provide additional detail on the assumptions and calculations underlying Exhibit B-1.
- 36. Costs. There are two basic categories of costs associated with UNE-Platform-based services: (1) "connectivity" costs (i.e., the costs associated with purchasing the necessary network elements from the incumbent), and (2) a carrier's own internal costs of running a local telephone service business (e.g., developing, maintaining and operating computer support systems, as well as marketing, customer care, and administration). My analysis focuses primarily on the former category of costs, which are readily identifiable and verifiable.

- 37. The monthly per line rates for UNE loops in Vermont are \$7.72 in Zone 1, \$8.35 in Zone 2, and \$21.63 in Zone 3. For UNE switch ports, new entrants pay \$1.03/line/month. These and the other relevant Verizon Vermont rates are listed in Exhibit B-2.
- basis. Therefore, it is necessary to combine published per minute rates with usage volumes to estimate the cost of the other network elements. Verizon local usage volumes are available from Verizon's annual "dial equipment minutes" ("DEM") submissions to NECA and ARMIS (the same data that is used in the Commission's Synthesis Cost Model). Verizon's 2000 reported DEM¹⁶ can be converted to 2002 DEM per line by adjusting upward the 2000 per line statistics by the annual growth rate between 1998 and 2000. This calculation of "usage minutes" retains the non-conversation time that is reflected in DEM and which is included in the cost of UNEs. I have assumed that there will be netting of charges for traffic terminating to a new entrant's UNE-P customer and thus originating local traffic and its associated termination is relevant for local usage on these lines. For the toll-related MOU categories, I am using the TNS residential volumes per line from the Bill Harvesting market research. These toll volumes and the calculations for local, usage are detailed in Exhibit B-3 to this declaration.
- 39. For each category of usage (e.g., local, intraLATA toll, etc.), particular network architecture assumptions must be applied. Local usage must be apportioned to reflect the fact that some local calls are "intraswitch" calls (where the calling and called parties are served by the same switch), some are "interswitch" calls. Interswitch calls require assumptions regarding the portion of these calls that are routed directly between the two switches and those that are

¹⁶ As local DEM was not yet reported for 2000, the 1999 split of intrastate between toll and local was used.

routed via a tandem. According to the Commission's Synthesis Model, approximately 2% of local interswitch minutes and 20% of intraLATA toll and interLATA minutes are tandem-routed. Approximately 35% of local calls in Verizon's network are assumed to be intraswitch calls. ¹⁷ See Exhibit B-4. The calculated intraswitch, interswitch, and tandem conversation minutes (or, in the case of toll calls, the toll direct and toll tandem conversation minutes) are then multiplied by the corresponding Verizon Vermont usage charges to arrive at expected monthly usage costs per line, as detailed in Exhibit B-5 to my declaration. The total monthly usage charge per line, which is also listed in Exhibit B-1, is \$8.75. ¹⁸

- 40. I have included the development of the DUF ("Daily Usage Feed") charge on Exhibit B-6 which amounts to \$1.03/line/month.
- 41. In total, the average recurring monthly connectivity costs (loop plus usage plus DUF) incurred by Verizon to serve a Vermont customer is \$25.50. This is an average of the monthly connectivity costs for Zone 1 (\$18.53), Zone 2 (\$19.16), and Zone 3 (\$32.44) weighted by the relative number of estimated residence lines in each zone served by Verizon. *See* Exhibit B-1.¹⁹

¹⁷ Although the Commission's Synthesis Model recognizes that about 50 percent of local calls would be intraswitch calls in an efficiently designed network with properly sized switches, the relevant figure for a new entrant contemplating entry is what it will actually pay Verizon. Because Verizon's existing network is not efficiently designed and sometimes uses two switches where one would be more efficient, the 35 percent figure must be used to determine expected connectivity costs that will be billed by Verizon to the competing carrier.

¹⁸ UNE purchasers must pay switching, transport and related usage charges for access-related usage whether a call is originated or terminated by their customer, and the assumption is that the customer receives as much access traffic as he or she originates. For intraLATA toll traffic, every originating minute is associated with a terminating minute to another customer (for simplicity assumed to be served by the same ILEC) in the ILEC's service area.

¹⁹ My margin analysis does not include non-recurring costs. As a result, my analysis understates that actual costs that Vermont entrants would incur, which correspondingly overstates margins that are available to entrants in Vermont.

- 42. **Revenues.** The Verizon local service rates that UNE-Platform-based providers can obtain for their services are effectively capped by the retail rates charged by Verizon. If new entrants attempt to charge higher rates than Verizon, these new entrants would be unable to attract customers. Verizon local service rates are readily available and verifiable from many sources, including CCMI. I have, however, supplemented the CCMI information with a recent news report regarding a recent decrease in basic service rates in Vermont.²⁰ Normally, the mapping of the local rates to wire centers and then mapping the wire centers to UNE zones determines the basic revenue by zone. In this case, the same tariff applies to all WCs with the basic service revenue at \$18.35/line/month.
- 43. There are, of course, other revenue opportunities available to new entrants. A local service provider can expect to sell vertical features to many customers. The rates that new entrants are likely to obtain for these services can be determined from Verizon's tariffed rates for these services. Based upon average of 4Q00 to3Q01 ReQuest market research data provided by TNS (formerly PNR), a new entrant in Vermont can expect, on average, to receive about \$2.25/month in vertical feature revenue. The federal Subscriber Line Charge brings in an additional \$5.00/month/line. Total expected customer revenues, therefore, average about \$25.73/line/month.
- 44. A UNE-Platform-based provider also earns access revenues for originating and terminating long-distance calls. This revenue may either be explicit (when a CLEC charges an independent IXC, or implicit if the CLEC acts as its own IXC). To estimate these access revenues it is necessary to multiply expected toll minutes (derived from the TNS toll data) by the

²⁰ See, e.g., Communications Daily, Volume 22, No. 24, at 9 (February 5, 2002).

relevant access charges that AT&T can replace with UNEs.²¹ My calculations show that a UNE-Platform entrant's estimated monthly per line access charge revenues are \$1.25/month. See Exhibit B-7.

- 45. Adding all of these revenues, AT&T (or another entrant) could expect to receive on average \$26.85/line/month from residential UNE-based service in Vermont.
- 46. **Margin.** There are many standard financial measures for assessing the profitability of investing (or continuing) in a line of business. The margin per line can be computed by comparing a carrier's expected costs with its expected revenues for each line. A "gross" UNE-P margin can be determined by subtracting expected direct connectivity costs from expected revenues. A "net" UNE-P margin can only be determined by subtracting all expected costs (*e.g.*, marketing, customer service, billing, order processing, and other operating activities), which usually exceeds \$10 per line, ²² from expected revenues.
- 47. This margin analysis for Verizon-Vermont shows that residential gross margins in Vermont are *negative* with respect to nearly half of the available lines in Vermont. The margins that are available to local entrants in Zone 3 which comprises 48% of the lines in Vermont are *negative* \$5.59. See Exhibit B-1. At the state-wide level, the average margin available to

Dedicated transport access charges are not included because AT&T does not avoid these access charges through its acquisition of a UNE-P local customer.

WorldCom has estimated that those "[i]nternal cost . . . exceed \$10 per line per month." WorldCom Corrected Reply Comments, Re: CC Docket No. 01-138 Application by Verizon for Authorization to Provide In-Region, InterLATA Services in Pennsylvania, Declaration of Vijetha Huffman at page 3 (August 7, 2001); see also WorldCom Comments, Verizon New Jersey 271 Application, CC Docket No. 01-347, Declaration of Vijetha Huffman (Filed January 14, 2002) (explaining why internal costs exceed \$10.00).

local entrants is \$1.35. That margin, however, is not remotely sufficient to allow the entrant to recover its \$10.00+ internal cost of providing local services.²³

VI. THE MARGIN ANALYSIS SUBMITTED BY VERIZON IS UNDOCUMENTED AND INACCURATE.

- 48. Verizon has filed its own "margin analyses" that, according to Verizon shows that residential UNE-platform entry would be economically feasible in Vermont. See CGA Decl., Att. 2. Verizon's purported margin analyses should be given no weight.
- 49. Verizon actually provides two margin analyses: (1) an "average customer" analysis and (2) a "Local Package" margin analysis. The "Local Package" analysis is irrelevant here. The "Local Package" offering is a feature-rich premium service that costs over *** *** more than Verizon's basic package. That means that Verizon's "Local Package" margin analysis would be correct only for a new entrant that chose to seek out and serve only that minority of Vermont customers who would purchase that premium package. Such an analysis is inappropriate in the Section 271 context; and with a state as small as Vermont, impractical as the initial cost of entry would not get covered, especially for the small highly-targeted high-churn customer set. Allowing Verizon to force new entrants in Vermont into a strategy that focuses only on high value customers that would purchase the "Local Package" service would contravene the public interest. All Vermont customers should enjoy the benefits from

It has been argued that interLATA toll revenues should be included in the margin analysis. That is wrong. First, carriers can compete for toll revenues even without entering the local market and, therefore, revenues associated with interLATA toll are not properly attributable to local entry. Second, local exchange service and toll service are entirely different markets. Third, to the extent that InterLATA toll revenues are reflected, the offsetting reductions in access costs would have to be taken into account, and the fact that InterLATA toll revenues are declining over time would have to be taken into account. But in any event, including interLATA toll revenues would make no difference to the results here. The impact of including interLATA toll revenues to the margin analysis would only increase margins by ***

*** The new margins would still be far too small to support local entry in Vermont.

competition, not just those who are able to (and choose to) purchase particular premium services. Moreover, targeted service offering could be practically implemented in the long run both because all new entrants would be relegated to competing for that sliver of the market and because Verizon could respond simply by offering greater discounts on that particular bundle of services. Thus, Verizon's assertion that the existence of a "Local Package" offering creates profitable entry opportunities is fundamentally incorrect and inconsistent with what I understand to be the goals of Section 271.

- 50. In all events, neither Verizon's "Local Package" nor "Average Customer" can not be relied upon to support Verizon's application because they are entirely undocumented and appear to contain numerous fundamental methodological errors and questionable data and assumptions. I will discuss first the issues in Verizon's revenue calculations, followed by those in Verizon's cost calculations.
- that entrants will receive ***

 *** in access revenues from the provision of UNE-platform residential services in Vermont. CGA Decl., Att. 2. As I show in Exhibit B-7, access revenues available to Vermont entrants are estimated to be 1.25/line/month. It is impossible to determine why Verizon's access revenue estimates are so inflated because Verizon has not provided any information as to how it developed its margin analysis.
- 52. Second, Verizon's margin analysis incorrectly includes toll revenues of

 *** *** (and *** *** in its "local package" analysis). Once again, no underlying

 assumptions are provided. In particular there appears to be no inclusion of the cost of access

 revenue that would need to be reflected if toll revenues are recognized. As explained above, I

estimated the impact of toll revenues on the margin analysis, if relevant at all to be ***

- 53. Third, Verizon's "local/SLC" category is overstated. Current Verizon SLC rates are \$5.00/line/month. Average basic local services rates in Vermont are \$18.35/line/month. Therefore, the total local plus SLC revenues that would be available to entrants in Vermont is \$23.35, not *** *** (or *** *** in its "local package" analysis) as Verizon asserts. See Exhibit B-1. Verizon offers no data or analysis to support its inflated local/SLC values.
- 54. Fourth, Verizon's revenue estimate is inflated by an unexplained ***

 line item titled "Other (Features, etc)." Again, there is insufficient detail to assess Verizon's assumptions. Based upon market research, Vermont entrants can expect to receive \$2.25 in monthly feature revenues. Apparently, the remaining ***

 *** (*** *** \$2.25)

 falls within the category that Verizon has labeled "other" or "etc." See CGA Decl., Att. 2.
- ost Calculation Errors. First, Verizon's analysis includes a "Loop" cost that is understated. As shown in Exhibit B-1, the average cost of a loop in Vermont (residential line weighted by zone) is about \$14.69. Verizon, however, has used the overall cost of loops in Vermont (business plus residence) of ***

 ***. This contamination of the residence margin calculation with business data leads to question what other of Verizon's numbers also reflect business. The average business loop cost is lower than residence. The average business customer has more toll minutes per line per month and thus both access revenue and toll revenue would be overstated.

- 56. Second, Verizon's purported margin analysis includes a *** costs labeled "Other." It is impossible to determine what that "Other" cost is meant to represent, and I do not speculate here.
- 57. In sum, Verizon's purported margin analysis cannot be given any credit. Verizon's purported margin analysis fails to show any of the assumptions or underlying data used to compute its margins. As one example, Verizon's simply asserts a value for access revenues, even though the amount of access revenues that are available to a CLEC depends on numerous assumptions relating to usage and penetration rates. By contrast, my margin analysis is fully documented and can readily be reproduced and tested by the Commission or any interested party.

VII. RESALE AND UNE-L ARE NOT REASONABLE ALTERNATIVES TO UNE-PLATFORM ENTRY.

- 58. Verizon has stated that the fact that its UNE-platform rates preclude residential competitive entry is irrelevant because competitors have other modes of entry available to them. According to Verizon, carriers can profitably provide local customers in Vermont resale or UNE-L offerings. Verizon is wrong.
- discount from the retail rates for those lines. The average retail revenue for a line in Vermont is about \$20.72. That means that a local entrant in Vermont can purchase those lines for resale for $(\$0.72 (0.19 \times \$20.72) =) \$16.67$. The margin that is available to local residential resale entrants in Vermont is the difference between the retail rate for that line and the discounted rate for that line, *i.e.*, \$20.72 16.67 = \$3.95. That margin does not even come close to covering the carriers \$10.00+ internal costs of providing that services.

on the only facilities-based alternative to UNE-P would be UNE-loop in which entrants would attempt to provide residential service by leasing unbundled loops from Verizon and combining them with the entrants' own switches to provide service. The Commission has already recognized that UNE-L based local entry is wholly uneconomic because entrants cannot rationally invest in switches until they have used UNE-P to build up a customer base. See UNE Remand Order ¶ 254-258. In addition, it is my understanding that Verizon has not deployed technology that allows customer's to electronically change from one local exchange carrier to another at no or minimal cost. Instead, the change requires manual "hot cuts" which can be expensive and are often not administered properly by Verizon. Put simply, UNE-L is no a viable residential entry strategy for voice services.

VIII. CONCLUSION

61. For the foregoing reasons, it is clear that Verizon's Vermont rates are substantially inflated.

²⁴ See, e.g., Comments of AT&T, Verizon 271 Application for New Jersey, CC Docket No. 01-347, at 23 (filed February 1, 2002).

VERIFICATION PAGE

I, Michael Lieberman declare under penalty of perjury that the foregoing is true and correct.

Muhaul Lule
Michael Lieberman

Executed on February 6, 2002.